ABSTRACT

This invention provides a high-strength hot-rolled steel sheet having strength of at least 980 N/mm^2 at a sheet thickness of from about 1.0 to about 6.0 mm and excellent in hole expandability, ductility and ability of phosphate coating, which steel sheet is directed to automotive suspension components that are subjected to pressing. The high-strength hot-rolled steel sheet contains, in terms of a mass%, C: 0.01 to 0.09%, Si: 0.05 to 1.5%, Mn: 0.5 to 3.2%, Al: 0.003 to 1.5%, P: 0.03% or below, S: 0.005% or below, Ti: 0.10 to 0.25%, Nb: 0.01 to 0.05% and the balance consisting of iron and unavoidable impurities;

satisfies all of the following formulas <1> to <3>:

$$0.9 \leq 48/12 \times C/Ti < 1.7 \quad \ldots <1>$$

$$50{,}227 \times C - 4{,}479 \times Mn > -9{,}860 \quad \ldots <2>$$

$$811 \times C + 135 \times Mn + 602 \times Ti + 794 \times Nb > 465 \quad \ldots <3>, \text{ and}$$

has strength of at least 980 N/mm^2.